CLAIMS

1. A transmission method used in a radio system comprising a base transceiver station (200) acting as a transceiver and subscriber terminals (100, 101) acting as transceivers which are connected to each other by means of a signal propagating through the base transceiver station (200), which signal contains speech or data which is coded before it is transmitted to the radio path and decoded when it is received from the radio path, and in which radio system the signal establishing the connection is transmitted in a radio channel formed for each connection, **characterized** by

measuring the radio channel and transmitting a control signal on the basis of the measurement results from a transceiver in DTX mode to a transceiver with which the transceiver in DTX mode has formed the radio channel, and transmitting the control signal at a power level which is lower than the power level used in transmitting speech or data signals, and

updating with the received control signals the operating parameters of the transceiver forming the radio channel to the transceiver in DTX mode.

2. A method as claimed in claim 1, **characterized** in that the operating parameters are coding and decoding parameters which affect the coding and decoding rate of the transceiver.

3. A method as claimed in claim 1, **characterized** in that the speech coding and decoding rates are altered with the operating parameters.

4. A method as claimed in claim 1, **characterized** in that the channel coding and decoding rates are altered by updating the operating parameters.

5. A method as claimed in claim 1, **characterized** in that with the control signals, the control data of the coding of the signal to be transmitted to the radio path and the control data of the decoding of the signal received from the radio path are updated, whereby the adaptation rate of coding and decoding can be altered.

6. A method as claimed in claim 1, **characterized** in that filler frames are transmitted during DTX, from which the status of the radio channel is measured, and when transmitting the filler frames, the transceiver in DTX mode is prevented from sending a control signal.

7. A method as claimed in claim 1, **characterized** in that the coding and decoding is done with an AMR codec whose adaptation to the signal being coded or decoded is controlled with control signals.

8. A method as claimed in claim 1, **characterized** in that during DTX, SID frames and L2 filler frames are transmitted at the same power level as speech and data signals, and the status of the radio channel is measured from the SID frames and L2 filler frames.

9. A method as claimed in claim 1, **characterized** in that during DTX, a signal is transmitted, from which the status of the radio channel is measured, and status data of the radio channel is transmitted in a control signal on the basis of the measurement results obtained from the measuring.

10. A method as claimed in claim 1, **characterized** in that during DTX, signals are transmitted, from which the radio channel is measured, and between the signals used for measuring, a control signal is transmitted in a continuous manner.

11. A method as claimed in claim 1, **characterized** in that during DTX, signals are transmitted, from which the radio channel is measured, and between the signals used for measuring, a control signal is transmitted in a discontinuous manner.

12. A radio system comprising a base transceiver station (200) acting as a transceiver and at least two subscriber terminals (100, 101) acting as transceivers which are connected to each other by means of a signal propagating through the base transceiver station (200), which signal contains speech or data; a transceiver in the radio system comprises a coder (122), which codes the signal being transmitted to the radio path, and a decoder (114), which decodes the signal received by the transceiver, which has propagated in the radio path in the radio channel formed for the connection between the subscriber terminal and the base transceiver station, **characterized** in that the radio system comprises

measuring means (115) which measure the status of the radio channel formed between the base transceiver station and the subscriber terminal,

transmission means (124) which transmit a control signal on the basis of the measurement results of the measuring means (115) from the transceiver in DTX mode to the transceiver with which the transceiver in DTX mode has formed a radio channel, and which transmission means transmit the

control signal at a power level which is lower than the power level used for transmitting speech or data signals, and

control means (120) which update operating parameters with the received control signals from the transceiver which is connected to the transceiver in DTX mode by means of the radio channel.

13. A transceiver as claimed in claim 12, **characterized** in that the operating parameters are coding parameters of the coder (122) and decoder (114), and updating them alters the coding and decoding rate used.

14. A transceiver as claimed in claim 12, **characterized** in that the control means (120) update the coding parameters of the coder (122) and decoder (114) acting as a speech coder, and updating them alters the speech coding and decoding rate.

15. A transceiver as claimed in claim 12, **characterized** in that the control means (120) update the coding parameters of the coder (122) and decoder (114) acting as a channel coder, and updating them alters the channel coding and decoding rate.

16. A transceiver as claimed in claim 12, **characterized** in that the coder (122) and decoder (114) alter their adaptation rate on the basis of the updating of the control signals.

17. A transceiver as claimed in claim 12, **characterized** in that the measuring means (115) measure the radio channel from the filler frames transmitted during DTX, and the transmission means (124) interrupt the transmission of the control signal while the filler frames are being transmitted.

18. A transceiver as claimed in claim 12, **characterized** in that the coder (122) and decoder (114) have been implemented with an AMR codec, for instance, whose adaptation to the signal to be coded or decoded is accelerated by updating the operating parameters.

19. A transceiver as claimed in claim 12, **characterized** in that during DTX, the transmission means (124) transmit SID frames and L2 filler frames at the same power level as speech and data signals, and the measuring means measure the radio channel from the SID frames and L2 filler frames.

20. A transceiver as claimed in claim 12, **characterized** in that in DTX mode, the transmission means (124) transmit a control signal in a

continuous manner between the signals measured by the measuring means (115).

21. A transceiver as claimed in claim 12, **characterized** in that in DTX mode, the transmission means (124) transmit a control signal in a discontinuous manner between the signals measured by the measuring means (115).

22. A transceiver as claimed in claim 12, **characterized** in that the transceiver in DTX mode is a base transceiver station (200) which transmits a control signal to a transceiver which is a subscriber terminal.

23. A transceiver as claimed in claim 12, **characterized** in that the transceiver in DTX mode is a subscriber terminal which transmits a control signal to a transceiver which is a base transceiver station (200).